AMENDMENT TO THE SPECIFICATION

Priority: This application is a division of 09/988,860 filed on November 21, 2001 which is abandoned.

Title: UTILIZATION OF RHINOLOGICALLY ACTIVE SUBSTANCES

Abstract:

Alicyclic compounds containing an ~~Acyelic~~ ether[[s]] functionality external to the ring can be used a rhinologically active substances. In the regions of the mouth, the throat and the airways they produce a refreshing and clearing feeling.

Detailed Description of the Invention

[00013] The fact that the inventive rhinologically active compounds exhibit an activity comparable to 1,8-cineole (eucalyptol), with respect to a refreshing clearing feeling in the mouth, pharyngeal cavity and the airways, was surprising and not predictable to the extent that the inventive ethers do not have the ether linkage within the ring of a cyclic structure like 1,8-cineole (eucalyptol), but have an alicyclic ~~acyelic~~ structure wherein the ether linkage is not within the ring.

[00018] Preparation of the ~~acyelic~~ ethers fro the inventive rhinologically active compounds is known per se. It can be performed, for example, by etherification of the corresponding alcohols with alkylating agents, such as alkyl halides, alkyl tosylates, alkyl mesylates or alkyl halides in the presence of an equivalent amount of a basic compound. Particularly advantageous here is etherification by the phase-transfer process, which is described, for example in Angew. Chem. 85,868-869 (1973), and is carried out as follows: the alcohol to be etherified is vigorously stirred in a nonpolar solvent in the presence of a phase-transfer catalyst, for example tetrabutylammonium iodide, with a 2.5-fold excess of 50% strength sodium hydroxide solution and 1.2-fold excess of an alkylating agent is added. After a customary cleanup, the corresponding ether is obtained, which is separated off from unreacted alcohol by distillation or liquid chromatography.